DOCUMENT RESUME

ED 463 588 EA 031 615

TITLE	Student-Centered High Schools: Helping Schools Adapt to the Learning Needs of Adolescents. Perspectives on Policy and Practice.
INSTITUTION	Northeast and Islands Regional Educational Lab. at Brown Univ., Providence, RI.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	2001-09-00
NOTE	14p.
CONTRACT	ED-01-CO-0010
AVAILABLE FROM	Northeast and Islands Regional Education Laboratory at Brown University, 222 Richmond Street, Suite 300, Providence RI 02903-4226. Tel: 401-274-9548; Tel: 800-521-9550 (Toll Free); Fax: 401-421-7650; e-mail: info@lab.brown.edu; Web site: http://www.lab.brown.edu.
PUB TYPE	Information Analyses (070)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Academic Achievement; Dropout Attitudes; Educational Improvement; *Educational Philosophy; Educational Policy; High Schools; Individual Needs; *Individualized Instruction; *School Policy; School Restructuring; School Size; Student Experience
IDENTIFIERS	Reform Efforts

ABSTRACT

High schools in the United States face tremendous challenges involving changes in cultural and economic forces and necessities. They need to transform themselves into places of learning where knowledge is relevant to students' needs and aspirations. Because many traditional high school structures are large, compartmentalized, and impersonal, they commonly contribute to student alienation and academic failure. The resulting disengagement can lead to students' withdrawing from learning, eventually dropping out, and entering society unprepared to continue their education or to work. Educational improvements can be made by connecting students' needs to existing structures and requirements that allow them to interact broadly with the adult world. The needs and talents of students can be represented in six dimensions: voice, belonging, choice, freedom, imagination, and success. Student engagement increases in schools that provide equity, community, opportunity, responsibility, challenge, and expectations. Meaningful student relationships revolve around recognition, acceptance, trust, respect, purpose, and confirmation. Reducing school size has been shown to affect academic achievement positively. Personalizing learning for high school students increases their engagement and allows high schools to be more flexible in adapting to today's societal changes. (Contains 43 references.) (RT)

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September 2001

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PERSPECTIVES on Policy and Practice

NORTHEAST AND ISLANDS REGIONAL EDUCATIONAL LABORATORY AT BROWN UNIVERSITY

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PERSPECTIVES on Policy and Practice

NORTHEAST AND ISLANDS REGIONAL EDUCATIONAL LABORATORY AT BROWN UNIVERSITY

Student-Centered High Schools

Helping schools adapt to the learning needs of adolescents

According to Brown University President Ruth Simmons,

> *A school ought to be a magical place where you are queen or king, and where what you get to do is to focus on your intellect, and on what you can accomplish as a human being, and you come to understand what your life can be. That's what school should be for children. Not a place where you go to study for a standardized test. Not a place where you go where you hear every day about the problems that you are. Not a place where you go where people tell you that you are underperforming. Not a place where you go where people tell you that you are part of some pathology.*
>
> *That's not what a school is supposed to be. School is supposed to be full of hope, and it's a place where you go to find out how magical your mind is and how terrific it will be when you develop your mind to its full potential.*
>
> (Ruth Simmons, quoted in *The Washington Post*, March 21, 2001)

In accounting for the striking difference between what schools ought to be and what they are, we find that schools must adapt to a contemporary set of problems, shaped by changing cultural and economic forces and necessities. What are the learning needs of adolescents today? What kinds of school structures and curriculum would assist young adults in becoming vital contributors to today's society?

The need to transform high schools in the United States into safe places where all students can reach their full academic potential, while also acquiring the skills and knowledge to succeed in college and careers, has never been more urgent.
(Richard Riley, quoted in Visher & Hudis, 1999)

Nor has the challenge ever been more complex. How can schools overcome the challenges they face as they try to meet the learning needs of adolescents?

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What challenges do schools face?

There are three central challenges facing secondary schools in our region and throughout the nation. At the heart of each of these is the failure to adapt the institutional environment to the individual learning needs of adolescent students.

- According to multiple indicators, many high school students, especially those living in poverty, perform poorly on state standardized assessments, drop out of school at high rates, and leave school ill-prepared for either further education or the work force.
- In many high schools in both urban and rural areas, outdated programs, curriculum, and instruction are ill-suited to changing demographic and economic realities.
- Most American high schools have not been able to adapt to social changes and demands for accountability. Historically, they have resisted change rather than embraced it.

Data on dropout rates, educational attainment, and student performance raise concerns about whether most adolescents complete high school with the skills and knowledge they need to succeed as adults. High school dropout rates remain unacceptably high in many parts of the nation, particularly in schools serving at-risk populations. Employers and post-secondary institutions report that too many students leave high school without achieving the competencies required for success. College-bound students are often ill-prepared for post-secondary education and lack direction in their choices of majors once they enter four-year colleges or universities. Students who are not college-bound often leave high school with weak academic skills, poor awareness of career options and requirements, and little training that will help them succeed in a changing job market.

What makes this a pressing problem today?

The broader problem may be that traditional high school structures cannot respond to multiple demands for accountability in an era of new demographic and economic realities. The size, structures, and traditional orientations of many secondary schools contribute to student alienation and academic failure; too many are large, compartmentalized, and impersonal. They have low expectations for student performance, and their curricula are guided by dated departmental priorities. Not surprisingly, many of their students are passive and disengaged. This is often a consequence of teacher-directed instruction and a fragmentation of curriculum that prevents students from seeing the connections between school content and real life. To make things worse, many high schools still divide students according to various measures of ability, thereby increasing inequalities over time (Marsh & Codding, 1999; Visher, Emanuel & Teitelbaum, 1999). Without new approaches to instruction that connect to the needs and learning styles of students, many will continue to fail and are likely to drop out of school. The social and economic costs are high; dropouts cost the nation as much as $77 billion a year (Beck, 1991).

These limitations are especially problematic in the face of rapid changes in the work force—changes that have deep implications for how the structure and content of contemporary high schools must be transformed. Just as the comprehensive high school was created in response to past social and economic necessities, schools today must adopt structures and curriculum suited to contemporary cultural and economic conditions.

How are the students affected?

Given the disconnects between schools and societal conditions, the disengagement of young people from their education is a serious problem. In a 1994 national survey, nearly 40 percent of more than 20,000 high school students of all backgrounds admitted they were "just going through the motions" in school. Research on the typical high school day helps explain why so many youth feel unmotivated. Many schools expect students to spend most of each day in isolation—listening to lectures, waiting, taking tests, and doing "seat work." At the same time, conventional schooling isolates young people from adults: what students do in school is dissociated from the life and work of the community in which they live. Most students have few, if any, opportunities to work alongside adults, let alone be taken seriously in an enterprise worthy of adult concern. Few structures and supports facilitate the path to post-secondary success—through further education, employment, or both.

Frequently, high school students withdraw their effort from academic learning and eventually drop out, not because they lack exposure to the information assessed in high-stakes tests, but because they do not believe that their high school curriculum is designed to serve them. For many high school students, a narrowly conceived curriculum consisting of basic facts and knowledge bears no connection to the lives they lead outside of school—which in many cases are lived under profoundly difficult social conditions.

How does personal engagement affect performance?

If we increase the extent to which the curriculum responds to students' individual needs and talents, and furthermore, if high school students see how the curriculum is relevant and responsive to them, we expect to see an improvement in the students' achievement. The LAB is conducting research that responds to the need to know more about how increasing personal engagement affects performance. We are guided by the hypothesis that personalization strategies will result in higher test scores, greater educational aspirations or career plans, and increased student motivation and achievement.

High schools have often defined the problem of low performance as a failure of alignment between high school classes and tests of achievement. Consequently, their solutions have favored narrowing the focus of instruction to basic skills and knowledge and using high-stakes testing to ensure accountability. An alternative explanation of low performance among high school students is that adolescents withdraw personal effort from academic learning when they perceive that school curriculum and systems do not reflect their own aspirations and culture or help them fulfill their own purposes (Ogbu, 1987; Fordham, 1988, Labov, 1982). From this perspective, low performance may result when high schools treat all students uniformly, depersonalizing the high school experience to achieve outcomes that are the same for all students. Successful high school programs for all students may depend on adapting curriculum and instruction to the unique interests and talents of each student (Clarke, forthcoming 2000).

Based on earlier research, members of the LAB's Secondary Initiative have begun to suspect that improved learning for all high school students might depend on "personalizing" the experience for students. After all, students grow increasingly distinctive and independent as they progress through the high school grades. Initiative members observed students in personalized settings such as the Met High School in Providence, Rhode Island. Observations suggested that students with little positive experience in conventional settings do aspire and achieve at high levels when they guide the direction of their own learning and participate in a wide range of learning experiences that demonstrate their mastery of high standards (The Met High School, 1999; Allen, 2000). In another study of five professional development high schools in Vermont, high school students met state standards as a result of the school supporting the students' personal attempts to gather information and present solutions to problems they regard as real and important to their lives (Clarke, Bossange, Erb, Gibson, Nelligan, Spencer and Sullivan, 2000). Is it possible that personal engagement is the foundation of success in learning for all high school students? That has become the focus of a research and development network that crosses New England. The network, which aims to develop high school programs that engage all students in learning, will also investigate the effects of different approaches to personal learning on high school achievement.

How can high schools engage each student in learning that meets individual needs and common standards?

Given the wide array of talents and aspirations among students, the special connection between local needs and school missions, differences in systems of support for high school renewal and a wide spectrum of legislative requirements across states, there can be no single answer to this question. Renewal can proceed in any state, however, when educators take one critical step: They must connect the developmental needs of young adults to existing structures and requirements, looking for support from schools and systems that allow individual students to interact broadly with the adult world. At this point in the project's five-year history, we can tentatively propose that student engagement

increases when a school creates structures and processes that allow each student to interact with the surrounding system and negotiate a personal path toward adult roles.

Figure 1 represents the tentative conclusions of the research group of the Secondary Initiative. These were based on shadowing 24 students through a typical day of classes and observing eight high schools in New England where personal engagement has been a high priority. The research team (Clarke, DiMartino, Fisher, Frazer, Hamann, and Smith, In Process) has represented the needs and talents of all students in six dimensions:

Voice: the need to express a personal perspective

Belonging: the need to create a unique and a group identity among peers and teachers

Choice: the need to examine options and select a personal path

Freedom: the need to assume increasing accountability for personal actions and their effects

Imagination: the need to create a projected view of self

Success: the need to demonstrate mastery of adult skills and knowledge

These observations are generally consistent with developmental theory and research (Erikson, 1968, 1962; Glasser, 1977; Clarke, 1990).

How can schools respond to the developmental needs of young adults?

We recognized in the field study that schools facing different geographic and economic problems constructed different approaches to engaging students. We saw that each school was moving along its own pathway toward personal learning for all. In general, we tentatively concluded that high schools in small settings can provide learning experiences and school structures that offer the following:

Equity: democratic processes that allow each student a voice in decisions of the group

Community: shared commitment among students, teachers, administrators, parents, and community members to the personal growth of each student

Opportunity: a wide range of options for the development of individual talents, interests, knowledge, and skills

Responsibility: learning tasks that involve students in experimenting with adult roles

Challenge: exposing students to complex tasks that mirror adult roles

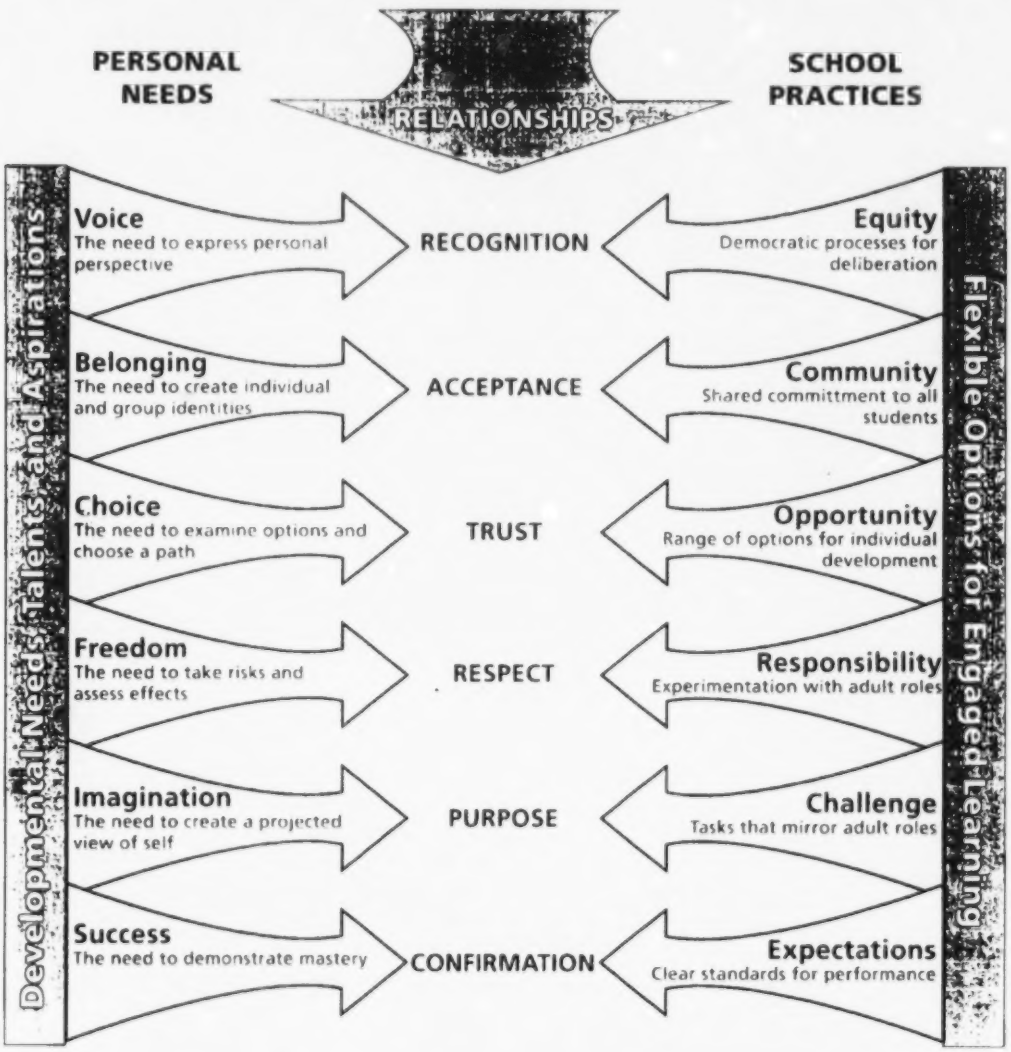
Expectations: clear standards for performance, representing the real challenges of work and college

Personal engagement, we began to see, occurs through the interaction of individual students with school practices and structures that respond to their unique talents and interests. To be effective, school processes must be flexible enough to engage students who are vastly different in their orientations to learning. Interactions between individual students and the adult world are the vehicle for personal learning. Organizing meaningful relationships between the student needs and the school practice may provide the key to improving student learning:

1) ***Recognition:*** offering opportunities to express viewpoints, participate in decisions, and recognize growth in competence
2) ***Acceptance:*** enabling individuals to pursue their own paths with the support of their peers and teachers
3) ***Trust:*** increasing opportunities to choose and assume independent roles in the school and larger community
4) ***Respect:*** earning admiration from the whole community for unique contributions in responsible roles
5) ***Purpose:*** creating relevance by allowing students to project their future selves through complex tasks that replicate adult roles
6) ***Confirmation:*** emphasizing performance in a wide variety of ways such that different students can represent what they know and are able to do

Figure 1: Developmental Needs and Responsive School Practices

Proposition: High schools may improve the performance of all students by developing program options that respond to the developmental needs of each young adult and by engaging them personally in using knowledge to shape a path toward adult autonomy. Learning occurs through the interaction of individual students with flexible learning opportunities developed by high schools and their communities.



PERSONAL LEARNING: Using information from the school experience to direct one's own life and to improve the life of the community

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These observations are generally consistent with earlier research (see Herzberg, 1961). Developing high school systems that are appropriate to all students and that also allow each student to attain personal goals is the main challenge of high school reform (Clarke, in press). In short, the challenge of successful high school reform depends on designing curriculum, school structures, and systems toward a guiding vision, one that supports the need of each student to fashion a personal pathway toward adult independence and community participation. Over four years, both the vision and the individual's program may become increasingly idiosyncratic, requiring school programs to become increasingly flexible as students grow in the six areas listed above (Newmann, 1992; Clarke & Agne, 1997).

What do educational practitioners and policymakers need to know?

Educational practitioners and policymakers need information on how to create a secondary-level education system that takes advantage of all the learning contexts, teachers, and resources a community has to offer. The search for learning models that are both academically rigorous and developmentally effective has become increasingly critical, especially in urban areas that report very low scores on new high-stakes assessments. Emerging models of secondary education are more learner-driven and contextual. They involve multiple teachers and caring adults outside the school building and are closely linked to post-secondary opportunity. They create powerful learning environments and incorporate proven advantages and innovations available through information technologies. Although these new models are available, educational leaders need assistance in translating and adapting them so that they become part of the educational mainstream and more widely available to youth.

A further problem in advancing school improvement is that schools lack the database capability necessary for analyzing and strategically using data to identify achievement gaps, address equity issues, determine the effectiveness of specific programs and courses of study, and target instructional improvement. In addition, inter-school information management strategies, which could promote effective exchange of information about students who transfer between schools in large urban districts, are often inadequate, limiting the ability of schools to respond to issues like high student mobility (Lachat & Williams, 1996).

What does it take to build student-centered learning communities?

Schools can be structured and organized to develop and sustain relationships of mutual respect. When students are the focus, the school day is organized to accommodate instructional priorities and student needs, and the school is "communally rather than bureaucratically" organized (McLeod, 1996). These communally organized schools "seek to promote an environment where students and staff are committed to the mission of the school and work together to strengthen that mission" (Lee, Smith & Croninger, 1997, p. 5). Three factors significantly contribute to a sense of community: first, an extensive array of activities that provides numerous opportunities for face-to-face interactions and shared experiences among adults and students; second, an extended job role for teachers who are not just subject-matter specialists, but who are engaged more directly in supporting students' personal development; and third, a set of shared beliefs about what students should learn, about the norms of instruction for engaging students, and common understandings about how people should relate to one another in the most positive way (Clarke, 1999; Clarke & Aiken, 2000).

Student "connection" to the school is the most salient protective factor against "acting out" behaviors, and students who feel a part of the life of school are more likely to stay in school and maintain good grades and good attendance (Marshall, 1992; Troob, 1985). In addition, schools in which individuals are provided responsible roles and in which high academic standards and extra-curricular achievement are maintained have a greater chance of fostering resilience in students facing difficult social conditions outside of school (Gordon, 1994; Luthar & Ziggler, 1991).

How does school size affect achievement?

Studies have also linked smaller schools to a range of positive outcomes. Raywid (1995) and Klonsky (1995) found that school size can affect attendance rates, frequency of disciplinary actions, school loyalty, use of alcohol or drugs, satisfaction with school, and self-esteem. According to Cotton (1996), the effects of school size on learning are more pronounced in schools with large concentrations of poor and minority children. In smaller schools, students feel less alienated, more nurtured, and more connected to caring adults; teachers feel that they have more opportunities to get to know and support their students (Stockard & Mayberry, 1992).

Gladden (1998) found a positive relationship between smaller school size, higher attendance rates, and lower dropout rates, particularly in schools that serve students from low-income families. Researchers attributed the positive affects of small size to the fact that it is easier to develop communal organization within smaller schools (Lee and Smith, 1995; Lee, Smith, and Croniger, 1997). Thus, the variable "smaller size" may be a proxy measure for the quality and depth of implementation of effective small learning communities. If schools are relatively large, they can be organized into such learning communities where learning can be more "authentic" and centered on the real life issues that students face outside school (McLeod, 1996; Lee, Smith & Croninger, 1997). In addition, school size also correlates with a school's ability to sustain reforms (McQuillan & Muncy, 1994; Muncy & McQuillan, 1993, 1996). Small schools also involve a larger proportion of staff in reform, thereby enhancing the likelihood of generating consensus for change.

What can be done to improve literacy among adolescents?

Much national attention has emphasized the need to support early literacy development. However, if we expect adolescents to succeed in learning tasks that involve higher order thinking skills across the content areas, their literacy development is just as critical and needs just as much attention (Commission on Adolescent Literacy, 1999). Our work at the high school level has made it clear that reading comprehension skills must become increasingly sophisticated to address the demands posed by more challenging academic expectations. According to Allen (2000), it is imperative that students at the middle and high school levels "grapple with texts that are expository, dense," and contain increasingly difficult vocabulary; this is especially true in mathematics, science, and social studies. In high schools, the skills needed to transact meaning from challenging texts are often not directly taught or sufficiently developed through instructional reading tasks.

"Learning for understanding" has been given considerable attention as a critical path to achieving at high levels (Bransford, in press; Brown & Campione, 1996; Newmann, Secada & Wehlange, 1995). For students to construct meaning and derive usefulness from what they "learn," they must be able to retain important information; understand topics and concepts deeply; and actively apply knowledge (Perkins, 1992). Reading and writing play a crucial role in the ability to "learn for understanding" (Graves, 1999). Adolescent students "must learn to think about the complexities of the reading process and then actively apply appropriate strategies" (Allen, 2000). They must therefore be given time to practice and apply literacy strategies to a variety of contexts, and subsequently use them for learning in the content areas.

A growing body of research supports the use of a variety of comprehension strategies to enhance learning in the content areas (Haller et al., 1988; National Reading Panel, 2000). However, the literacy demands of different content areas, while sharing some similarities, also vary substantially (Grossman & Stodolsky, 1995). "Reading is a different task when we read literature, science texts, historical analyses, newspapers, tax forms. This is why teaching students how to read the texts of academic disciplines is a key part of teaching them these disciplines"(Strategic Literacy Initiative, 1999, p.2).

Teaching reading comprehension strategies to students at all grade levels is complex. Many middle and high school teachers assume that their job is to focus on content, while elementary teachers teach reading. Because many secondary teachers also feel that they lack the expertise to teach reading, they unintentionally "enable" students not to read (Allen, 2000; Czako, 1998).

Thus, instead of getting the practice they need to strengthen skills, many secondary-school students are actually reading and writing less.

Although research-based reading strategies may be applied in schools on a piecemeal basis, some researchers believe that success in solving older students' comprehension problems depends on using strategic frameworks that will move them to a deeper understanding of the information they read (Allen, 2000). At the elementary level, we have a growing knowledge base about the types of teaching and learning, styles of leadership, levels of school and district support, amount of resources, and options for professional development that make a school-wide literacy approach balanced and successful. The current challenge is to develop and apply knowledge of how to design, implement, and sustain such parallel efforts related to literacy at the middle and high school levels.

Are there models to help school staff re-envision the education of young adults?

The above issues are driving the emergence of new frameworks. These frameworks guide efforts at restructuring schools in ways that engage adolescent students, support their development, prepare them for today's social and economic realities, and ensure their access to high-quality learning. The LAB has been examining the effect of utilizing one such framework as a vehicle to bring about whole-school change, which is necessary to achieve the desired result of personalizing the high school experience for all students. Developed by the National Association of Secondary School Principals (NASSP) in partnership with the Carnegie Foundation for the Advancement of Teaching, *Breaking Ranks: Changing an American Institution* provides a series of recommendations that offer a powerful and challenging vision of the 21st century high school. The overarching and paramount theme of *Breaking Ranks* is that the high school of the 21st century must be more student-centered and intellectually rigorous, and much more personalized in programs and support services. Such high schools are learning communities that reflect cultures of respect and trust among staff and students, and where the spirit of teaching and learning is driven by inquiry and high standards of learning for all students.

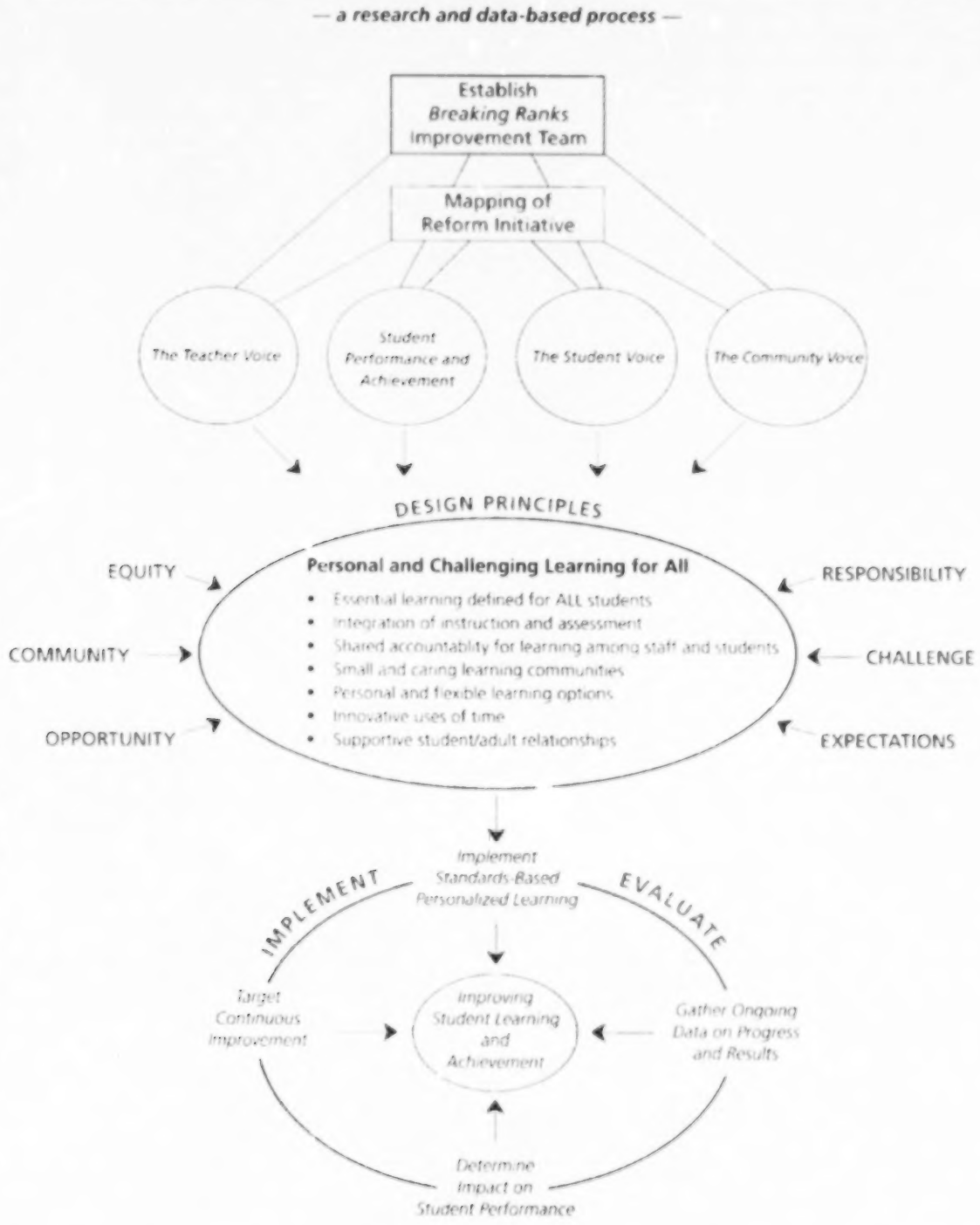
The LAB has recognized the potential of *Breaking Ranks* as a vehicle for guiding reform in low-performing schools in this region. As a result, we are developing and researching a systemic, data-based process to support implementation of the framework. In collaboration with NASSP, the Massachusetts Association of Secondary School Principals, the Rhode Island Department of Education, and ten northeastern high schools, the LAB already developed and tested implementation components of the model. This research and development provides a foundation as we work to find out what it takes to implement the *Breaking Ranks* model and what its effects are.

In New England, the accreditation process of the Commission on Public Secondary Schools of the New England Association of Schools and Colleges (NEASC) affects 700 high schools (95% of the public high schools in New England). When NEASC, in partnership with the LAB, substantially revised its accreditation process, it significantly increased the regional focus on standards, quality of instruction, and student-centered learning environments. High schools in New England must now demonstrate that they support all students in meeting the same high standards of academic, civic, and social achievement. The LAB's comparison of three frameworks (the new NEASC "Standards and Indicators for Accreditation," the *Breaking Ranks* recommendations, and the key reform strategies associated with the *New American High Schools* initiative) showed a remarkable congruency for school improvement (DiMartino, 1999).

The *Breaking Ranks* framework, which contains benchmarks for an effective American high school, is widely viewed as a guiding force for high school improvement throughout the nation. Its themes parallel those of the U.S. Department of Education's *New American High Schools* initiative, which showcases school reform practices in a few carefully selected high schools.

Each of these three frameworks for school reform emphasized high standards of learning for all students. However, a recent analysis of 26 whole-school reform models showed that only 6 of 21 models explicitly include raising academic standards and expectations (Catalog of School Reform Models: Electronic Edition, 1998). For many schools, putting higher standards into place is

Figure 2: The Breaking Ranks Partnership for School Change



complex; there are disagreements about the best way to raise academic expectations in high schools, and it will take more than establishing rigorous standards on paper to communicate that high performance is expected of all students (Visher & Hudis, 1999).

Conclusion

Educators are beginning to realize that a 21st century American high school must be radically different from the high schools we have now; that is the encouraging news. The difficulty lies in moving from what currently exists to schools that are more student-centered and engaging for all of the people in it—adults as well as students. Historically, high school reform has proven disappointing. That's because most reform initiatives overlook a defining attribute of young adult learners: their drive to establish an independent identity in their community.

To date, the effort to change high schools has consisted largely of setting standards for all high school students. This approach seeks uniformity of achievement among high school graduates, clearly a worthwhile goal. However, the standards approach can be implemented unsuccessfully if educators fail to address the adolescent need for individuality. That driving need is often manifested as rebellious determination not to be treated as members of any category. The standards movement has already shown that imposing a single set of expectations on young adults may modestly improve test scores, yet fail to engage students who grow increasingly determined to explore their uniqueness and assert an independent pathway into adult life. Young adults are driven to create and express a personal role in the adult world around them. Faced by adult challenges in a highly complex society, high school students respond actively to learning opportunities when they can assume increasing responsibility for plotting their own course. We will not get all students to achieve high standards until we personalize the learning experience for all of our young adults.

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PERSPECTIVES on Policy and Practice

This publication is based on work sponsored wholly, or in part, by the Office of Educational Research and Improvement (OERI), Department of Education, under contract no. ED-01-CO-0010. The content of this publication does not necessarily reflect the views of OERI, the Department, or any other agency of the U.S. Government.

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